

PRODUCT DESCRIPTION AND APPLICATION

NMSiCΩSi99@35 is made of spherical silicon-coated SiC nanoparticles (primary particles) and is supplied as a powder.

This product can be used as an additive in various elastomer, composite or metal alloy formulations to improve electrical, mechanical, chemical and/or plasma-resistance properties of the matrix.

BASIC CHARACTERISTICS

Specific Surface Area (m ² /g)	=	55 - 70
Density (g/cm ³)	=	2.9 - 3.3
Average Particle Size (nm)	=	26 - 40
Moisture Content (wt.%)	=	< 1

CRYSTAL STRUCTURE

Core crystal phase	=	SiC 3C (beta) only
--------------------	---	--------------------

CHEMICAL COMPOSITION

Silicon Excess (molar %)	=	1 - 6
Silicon (wt. %)	=	63 - 75
Carbon (wt. %)	=	23 - 35
Oxygen (wt. %)	=	< 4
Iron (ppm)	=	< 40
Chromium (ppm)	=	< 20
Nickel (ppm)	=	< 5

MICROSCOPY ANALYSIS

